

What is claimed is:

1. A base station apparatus comprising:

investigating means for investigating network  
identifiers of existing base stations having overlapping  
5 communication network service areas; and

network identifier assigning means for assigning  
an unused network identifier as the network identifier  
of the own station based on said result of investigation.

2. A base station apparatus comprising:

10 investigating means for investigating network  
identifiers of existing base stations having overlapping  
communication network service areas;

setting means for setting an extension identifier  
when said result of investigation shows that there is  
15 no unused network identifier and extending the number  
of bits assigned to the network identifier; and  
network identifier assigning means for assigning an  
unused network identifier as the network identifier of  
the own station.

20 3. The base station apparatus according to claim  
1, further comprising a table that correlates  
communication networks with network identifiers.

4. The base station apparatus according to claim  
1, wherein said investigating means conducts  
25 investigation based on network identifier information  
sent from existing base stations.

5. The base station apparatus according to claim  
1, further comprising a scrambler that performs

scrambling processing on network identifiers.

6. A communication terminal apparatus that carries out a radio communication with a base station apparatus, said base station apparatus comprising:

5        investigating means for investigating network identifiers of existing base stations having overlapping communication network service areas; and

         network identifier assigning means for assigning an unused network identifier as the network identifier  
10      of the own station based on said result of investigation.

7. A communication terminal apparatus comprising:

         receiving means for receiving a signal including information that correlates communication networks with network identifiers; and

15        transmitting means for periodically transmitting said information to the other end of communication.

8. A network identifier assignment method comprising:

         a step of investigating network identifiers of  
20      existing base stations having overlapping communication network service areas; and

         a step of assigning an unused network identifier as the network identifier of the own station based on said result of investigation.

25        9. A network identifier assignment method comprising:

         a step of investigating network identifiers of existing base stations having overlapping communication

network service areas;

a step of setting an extension identifier when said  
result of investigation shows that there is no unused  
network identifier and extending the number of bits  
5 assigned to the network identifier; and

a step of assigning an unused network identifier  
as the network identifier of the own station.

10. The network identifier assignment method  
according to claim 8 that conducts investigation based  
10 on network identifier information sent from existing  
base stations.

11. The network identifier assignment method  
according to claim 8, further comprising a step of  
performing scrambling processing on network  
15 identifiers.